		JOB HAZA	RD ANA	LYSI	S	- 1994 - 1994 - 1994			
Hazard Types (HT)	Job Task:	On-Scene							
 Toxic Chemic Flammable Chemicals Corrosive Chemicals 	Job Frequency/D 60% of the year 1 -21 days	uration:	CRITICAL TO SAFETY (CTS) Risk Estimation Matrix						
4. Environmental5. Explosion (Chemical Reaction)	18. Fire, Heat, Thermal, Cold 19. Noise	Tools Used: Digital Camera Laptop GPS unit			Probability of Occurrence of Harm	Catastrophic	Serious Serious	OF HARM Moderate	Minor
6. Explosion (Over pressurization)7. Mechanical/Vibration	20. Radiation (Ionizing/Non-Ionizing)			goppe de l'accident de la company de la comp	VERY LIKELY LIKELY	Extreme High	High High	High Medium	Medium
8. Electrical (Shock, Short Circuit)	21. Visibility	Gear Bag			UNLIKELY	Medium	Medium	Low Neuligible	Negligible
9. Electrical (Fire) 10.Electrical (Static, ESD) 11.Electrical (Loss of Power)	22. Weather 23. Caught (In, On, Between) 24. Struck (By, Against)	Chemicals Used: None			REMOTE th = CTS tasks should recontrols.	Low eive engineering	Low controls pric		Negligible administrative
12.Ergonomic (Overexertion) 13. Ergonomic (Human Error)	25. Driving 26. Confined Space								
14. Vibration	27. Biological (Pathogens, animals, etc.)								
	28. Fatigue 29. Other								

Job Description: The OSC responds to releases of hazardous substances and petroleum products under CERCLA or OPA, respectively. The response may involve assessment, stabilization, and cleanup of the hazardous substance or petroleum product. The response can take place in any conceivable location, time, and weather condition. The Emergency Management Program (EMP) expects the OSC to be able to work safely in a hazardous environment with proper training on awareness and use of PPE. As stated in the PPE Program, EMP expects engineering and administrative controls will be considered before relying on PPE for protection.

Step	Procedures (LOP Procedure Step)	Potential Hazards	HT	Check CTS	Required Safe Practice	PPE
1	Response to scene of accident	Ergonomics, Driving, Weather	13, 21, 22, 24, 25, 28	Medium	Careful lifting techniques, secure grip, packing at desk level or higher; Drive defensivly; do not text while driving	None
2	Assess the situation and determine if release needs to be secured and stabilized or is ready for cleanup. If clean-up is required, write a HASP prior to cleanup activities commensing. Perform cleanup activities.	Chemicals, heat/cold stress, fire, explosion, noise, slips/trips/falls, biological, electricity, radiation, confined space	1-29	Low – Extreme	Reference table below and PPE	Hazard Assessment Form
3	Demobilize	Ergonomics, Driving, Weather	13, 21, 22, 24, 25, 28	Medium	Careful lifting techniques, secure grip, unpacking at desk level or higher; Drive defensivly; do not text while driving	None

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Physical		***************************************							Biol	ogical								
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General	\boxtimes	explosion	Ø	fire	\boxtimes	wea	ther		Anir	nals	\boxtimes	dog	gs	\boxtimes	feral animals	\boxtimes	snakes	
	X	fatigue		violence	\boxtimes	illn	ess/injury		Inse	rte	\boxtimes	spic	ders	\boxtimes	mosquitoes		wasp/homet	
Radiation	Ø	ionizing	\boxtimes	microwave		ligh	it .				X	bee				·		
x z = 1. f = 7	\boxtimes	traffic		heavy equip	Ø	forl	dift		Path	ogens		·	odborne		sewage		med/lab	
Vehicles	\boxtimes	helicopter	\boxtimes	small aircraft	\boxtimes	boa	t		Othe	r Biological:	\boxtimes				domestic animal bandoned chem		rpions, chemistry	
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Industrial	Ø	equip	\boxtimes	moving parts	L	4	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		700	<i></i>	X	sev			landfill		smoke/dust/fume	
Overhead	\boxtimes	obstruction		falling objects	***********************	***************************************	<u></u>		Was	tes			etals		PCBs	X	paints/surfacing	
·····	\boxtimes	roof		scaffold	\boxtimes	lade	der		Parti	culates		fib		Ø	diesel		asbestos	
Elevation	\boxtimes	stairs	\boxtimes	catwalk		.1			ļ	pling	\boxtimes	aci	***************************************	Ø	bases	1		
oit t		terrain	Ø	debris	\boxtimes	slip	pery		Other Chemicals: Industrial chemicals, mercury, pesticides, chemical warfare									
Slips/trips	\boxtimes	trench	\boxtimes	pits/holes	£					a Caloninouis.		age	ents, biolog	gical	agents	***************************************		
Other physic	al haza	ards:	Ø	High altitudes,	physi	ical e	xertion, driving											
EQUIRED PE	RSONA	l Protective	EQUIP	MENT (PPE) (CH	ECK A	all T	HAT APPLY)		Отне	R REQUIRED S	AFET	v Eqi	UIPMENT/I	FRAIN	IING			
Feet:		safety boots	Σ	steel-toe boo	ots		shank		\boxtimes	dosimetry			⊠ cc	ommı	ınication]	decon	
r Cot.		rubber booties		waders			other:		\boxtimes	first aid kit				**************	inguish		flares	
Gloves:		leather	. [cotton			cut- resistant			chains/studs		·····		ye wa	sh/shower	·		
		chemical resis	- Ren]										
Body:	\boxtimes	safety vest	ĮΣ				harness		ГП	24 hr HAZW	ODEI	>	3 40	O he L	IAZWOPER		HAZWOPER.	Annual Dafra
		tyvek	<u> </u>	······································			coveralls			TLD Program					ogram	*************	Medical Surve	***************************************
Eyes:		safety glasses	<u> </u>	sunglasses			goggles		VN 1ED Hogram						g; 2) Radiation Safet	****		
Head:		hard hat		hearing protection			respirator		×	1 st Aid/CPR			⊠ W	Vatero			4) Bloodborne path	
OMMENTS:	en e									1		(Section of		YEAR STATE		2016/7/0		

Potential chemical exposures are numerous and include, but are not limited to, VOCs, SVOCs, pesticides, herbicides, solvents, fuel, radionuclides, asbestos, mercury, chemical warfare agents, and biological agents. Personnel may also encounter abandoned chemistry laboratories, in which chemicals may still reside. Although personnel are not conducting the remedial actions themselves, they are in close proximity to contractors conducting the work and have the potential to encounter the hazardous constituents. Depending upon the situation, personnel may require use of respiratory protection to reduce exposures to airborne contaminants. Personnel are potentially exposed to hazardous noise; however, exact sound levels are not known at this time. Further analysis is required. Sources of hazardous noise include industrial equipment, theavy equipment, etc. Personnel are required to wear ear plugs and/or muffs while working around hazardous noise sources. Employees engage in field activities during all types of weather conditions, to include extreme heat and cold. Thermal stress is a viable hazard; therefore personnel must ensure adequate hydration and appropriate field gear is worn while engaging in field activities. In addition, field activities are conducted on various terrain and in remote locations where pits, holes, and trenches are encountered. Personnel need to be cognizant of their surroundings, utilize steal-toed boots, and take evasive actions to avoid contact with such hazards. Potential fire and or/ explosions hazards are possible. Personnel need to be cognizant of their surroundings, utilize steal-toed boots, and take evasive actions to avoid contact with such hazards. Potential fire and or/ explosions hazards are possible. Personnel need to be cognized by either a State Representative, site owner or responsible party who are knowledgeable about site conditions. Personnel may climb structures, greater than 4 feet above ground surface, to observe potential deficiencies. Personnel climb stairways with approri

CERTIFICATION OF HAZARD ASSESSMENT		1	
SUPERVISOR: Off	DATE;	SAFETY/HEALTH REPRESENTATIVE:	DATE:
James Pallien	6/1/15	of smalle Cr	<u>3-2-15</u>

PPE Hazard Assessment Form

Che	mical Hazards	HEALTH AND SAFETY HAZARDS Description/Mitigation
X	Vapors/gases	Personnel may be potentially exposed to a wide variety of chemicals during response activities.
X	Dusts/mists/fumes	Personnel may be potentially exposed to a wide variety of chemicals during response activities.
X	Liquid splash	Personnel may be potentially exposed to a wide variety of chemicals during response activities.
Com	fuel, rac chemist themsel	al chemical exposures are numerous and include, but are not limited to, VOCs, SVOCs, pesticides, herbicides, solvents, dionuclides, asbestos, mercury, chemical warfare agents, and biological agents. Personnel may also encounter abandoned try laboratories, in which chemicals may still reside. Although personnel are not conducting the remedial actions lives, they are in close proximity to contractors conducting the work and have the potential to encounter the hazardous ments. Depending upon the situation, personnel may require use of respiratory protection to reduce exposures to airborne inants.
Phy:	sical Hazards	Description/Mitigation
X	Ergonomics	Personnel may experience repetitive motions, frequent or heavy lifting, pushing, pulling, or carrying of heavy objects; and prolonged awkward postures. Vibration and cold may add risk to these work conditions. The level of risk depends on the intensity, frequency, and duration of the exposure to these conditions. Careful lifting techniques along with secure grips and packing at desk level or higher will reduce potential exposures.
X	Heat —high temperatures	Employees engage in field activities during all types of weather conditions, to include extreme heats. Heat stress is a viable hazard; therefore personnel must ensure adequate hydration and appropriate field gear (light weight, loose fitting and light-colored clothing) is worm while engaging in emergency response activites. Personnel must be knowledgeable on the signs and symptoms of heat stress, heat stroke, and heat exhaustion and understand corrective measures to take.
Х	Cold —cold temperatures	Employees engage in field activities during all types of weather conditions, to include cold weather. Although field activities are performed in termperate climates, cold weather may be a potential hazard. Personnel must ensure adequate hydration and appropriate field gear (layers, protecting the extremities especially fingers, toes, nose, and ears) is worn while engaging in response activites. Personnel must be knowledgeable on the signs and symptoms of frost bite and hypothermia and understand corrective measures to take.
X	Electricity	Employees may be exposed to electrical shock during response activities, depending upon the structural integrity of the overall power grid while commuting and the facility's internal electrical system. Always assume power lines are live and never touch or drive over them. Maintain a safe distance from all electrical components. If exposed lines are present, do not touch any metal objects/equipment nor stand in nearby pools/puddles of water.
X	Radiation — ionizing, non- ionizing	Personnel may encounter ionizing & non-ionizing radiation, above background levels, while at sites. Personnel conduct radiation assessments prior to site entry. EPA employees are enrolled in the Regional TLD program and assigned a radiation badge for use during site visits which may have sources of ionizing radiation. Annual Radiation Safety Training is required.
X	Noise	Personnel are occasionally exposed to various sources of hazardous noise, to include industrial equipment. However, the equipment is usually abandoned and inoperable. In addition, personnel may work around/near heavy equipment (e.g. debris removal trucks, backhoes, dump trucks, etc.) Personnel must wear ear plugs and/or muffs while around hazardous noise sources. Noise levels have not been documented. Further analysis is required.
X	Fire/Explosion	Due to the nature of emergency responses, potential fire and or/ explosions hazards are probable due to broken gas lines and damaged electrical lines or appliances. Personnel may be exposed to existing fires or new fires created by aftershocks. Incompatible chemicals (flammable, corrosive, ignitable) may interact due to a variety of circumstances, creating an explosion hazard. If personnel observe any spills/leaks/releases, they should exit the area immediately. Personnel should also follow the emergency response procedures given during the situational awareness/safety briefing.
X	Slips/Trips/Falls	Slips/trips/falls are always probable conducting field visits, outside where pits, holes, and various terrains are encountered. Personnel need to be cognizant of their surroundings, wear steel-toed safety boots, and take evasive actions to avoid contact with such hazards.
X	Elevation - Falls	Personnel may climb units, greater than 4 feet above ground surface, to observe potential deficiencies. Personnel climb stairways with approriate handrails and/or ladders affixed to various units. Personnel must inspect stairways/walkways to ensure structural integrity and/or question site personnel regarding structural stability prior to climbing. Personnel may climb step ladders or extension ladders to inspect equipment. Personnel must pay close attention to the Duty Rating of the ladder and the combined weight of the user and materials. Select a ladder with the proper capacity. Also, be sure to select a ladder of proper height to reach the work area without overextending. Be aware of wires, electrical devices and live electrical circuits. Metal ladders conduct electricity and can create a danger of electrocution. Failure to read and follow instructions regarding electrical safety could result in serious personal injury or death.

Phy	sical Hazards Cont.	Description/Mitigation
x	Confined spaces	Although employees <u>do not</u> enter confined spaces, they may still encounter confined spaces and need applicable awareness training. Such confined spaces are found in industries such as ships, paperboard mills, telecommunications, sewer, petroleum refineries,nd chemical storage and/or distribution. Personnel are restricted from permit required confined spaces. If you are not sure, do not enter.
X	Driving	Vehicular accidents and traffic are potential hazards encountered while driving to and from sites. Defensive driving training is required (every 3yrs). Personnel must be attentive to the absence of stop lights, debris in roadway, downed or low-hanging electrical/power lines, other vehicles, etc. Do not use hand-held devices or text while driving. Personnel must keep updated maps and routes, and keep cell phone charged and readily accessible for emergency communications or situational updates.
x	Other	Fatigue is also a concern due to potentially long working hours (12-16 hours/day). Personnel must limit work shifts to a maximum of 16 hours including travel time to and from base station. Ensure adequate sleep of at least 7-8 hrs and take frequent breaks. Personnel should check weather forecasts prior to deployment and prepare for conditions prior to leaving for the site.
Biol	ogical Hazards	Description/Mitigation
x	Animals	Employees may encounter a variety of animals and insects while in the field. These include dogs, feral animals, snakes, mosquitos, spiders, bees, wasps, etc. Personnel must pay special attention to displaced household pets, as they can be especially dangerous. Personnel are not to engage no matter how friendly they seem. Personnel should wear appropriate field gear depending upon the location (e.g. long sleeves, long pants, snake chaps, insect repellent, etc). Personnel need to be cognizant of their surroundings and take evasive actions to avoid contact with animals/insects.
X	Other	Personnel have the potential to encounter unknown water and/or raw sewage, in which various pathogens are present. Personnel utilize latex gloves and administrative controls, such as non-entry procedures, to reduce potential exposures to biological hazards. Personnel are required to practice good hygiene, such as proper hand washing and/or antimicrobial wipes/liquid, to reduce biological exposures.
		Employees are often in remote locations, in which poison ivy and other infectious plants are present. Personnel must be trained to ensure they are aware of the surroundings and avoid plants to prevent injury/iillness. Cut-resistant gloves should also be utilized to reduce potential exposures.

Completed by: Kendra Gomez & Rita Engblom

Updated by: Kendra Gomez

SHEMP Review

Date: March 15, 2012

Date: November 4, 2014
Date: HARCH 2, 2015

Required Personal Protective Equipment

Where engineering and administrative controls are not feasible or sufficient for controlling hazards, PPE must be used to protect workers. The following PPE is required for the noted tasks above:

Ey	e and Face Protection		
X	Safety glasses with side shields		Reflective goggles/face shield
	Chemical splash goggles		Cutting/brazing/welding eye protection
	Face shield		Other:
He	ad Protection		
X	Hard hat		Helmet, cowl, hood
	Welding helmet/mask		Other:
Foo	ot Protection		
X	Steel-toed safety shoes/boots		Other:
X	Chemical-resistant booties		
Boo	dy Protection	3	
	Apron (splash, work)		Head-reflective garments
	Lab coat	-	Sleeves (cut-resistant)
X	Coveralls (work, chemical-resistant) Type chemical: Varies Type coverall: Totally encapsulating chemical-protective (TCEP) suit; tyvek; saranex	X	Other: Appropriate field gear for the weather (thermal/cold stress); Reflective safety vest; USCG Personal Flotation Device (Type I, II, or III);
Res	spiratory Protection		
X	Respirator	X	Type of respirator: Full Face Air Purifying Respirator with appropriate cartridges for the contaminant of concern; Self-contained breathing apparatus (SCBA); Powered Air Purifying Respirators (PAPRs)
Hai	nd Protection		
	Rubber insulating gloves		Rubber insulating sleeves
	Rubber insulating hoods	X	Other: **Chemical Resistant Gloves (type dependent upon chemical of concern)

Other:

Ear plugs and/or muffs

Sunscreen (personal issue item)

Insect repellent personal issue item)

**Chemical resistant gloves must be selected based upon adequate breakthrough times for specific chemicals of concern. Please contact the R6 Health & Safety Office for assistance in glove selection.

HEALTH & SAFETY TRAINING REQUIREMENTS

EPA employees must maintain HAZWOPER certification and are required to have the following:

Course Name	Training Location	Training Frequency
40 hr HAZWOPER Training	In-Class	Initial – One time
8hr HAZWOPER Refresher	In-Class	Annual .
24hr EPA H&S Training for Field Activities (OTH 952) modules:	Skillport Website	Initial
Watercraft Safety TrainingConfined Space Entry	(EPA E-Learning)	
Radiation Safety Training	Skillport Website (EPA E-Learning) or H&S Office	Annual
Defensive Driving	GSA Website	Every 3yrs
First Aid/CPR	In-Class	Every 2yrs
Respirator Fit Test & Training	H&S Office	Annual
Bloodborne Pathogen Awareness	OSC Meeting	Annual

OCCUPATIONAL MEDICAL SURVEILLANCE PROGRAM (OMSP)

Employees enrolled in the OMSP will receive their periodic exam under Work Order 020, "Emergency Response Coordinator & OSC".

ON-SCENE COORDINATORS

DATE	EMPLOYEE NAME	EMPEOYÉE SIGNATURE	Employer Name
3/2/2015	Staphen Mason	8m Lin	US EPA R
12/2019	Ce Juin Phote sperey	20 100 100	T. T.
2/2015	Brandi Todal	7900	- 11
12/2015	NICOLAS BRESCIA	Mix Bom	USEPA R-6
2/2015	Roberto Bernier	G/B-	
12/15	Augm Augms	Auth	4
-2-15	Mike Mc Afeer	m, males	M.
2-2-/5	Jon Rinehart	Jos Rinchest	USEPA-R
12/15	Altheo C. Josh	Alheo Chook	* (
1/2/15	J. Chris Petersen	Jais Pettisen	(1)
12/295	Bryant Smalley	Braffe	War and the second
12/19	Donald P Smith	Doublettal	
4/15	John Martin	Alu Mathin	R6
12/15	Ere Dola de	1	RE
12/15	MAGIC HAYES	The the	26
2/15	Okana Endes	Kamenders	USEPA RE
120/15	A D Balgack	Auto	US EPA RE
130/15	GARY Moore	Huy Mung	USEPA RE
06/15	Warren Telher	Manen John	- US EPA R
16/15	Monica Smith	MAC	US/5PA-RG
16/15	SWilster	Swelter	